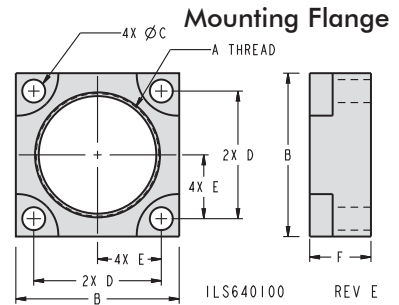
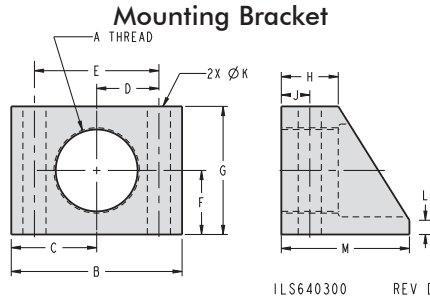
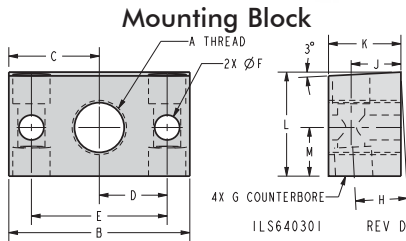


Hardware

Mounting



Mounting Block

Model No.	A	B	C	D	E	F	G	H	J	K	L	M
64-0306-00	5/8-18	2.25	1.13	0.81	1.62	0.34	5/16 SHCS	0.72	0.68	1.00	1.22	0.56
64-0307-00	3/4-16	2.50	1.25	0.94	1.88	0.34	5/16 SHCS	0.72	0.68	1.00	1.44	0.67

Mounting Bracket

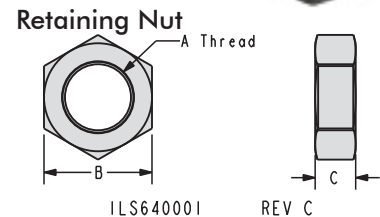
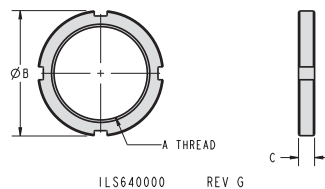
Model No.	A	B	C	D	E	F	G	H	J	K	L	M
64-0310-00	1 1/16-16	2.25	1.12	0.81	1.62	0.87	1.75	0.75	0.50	0.34	0.25	2.00
64-0313-00	1 5/16-16	2.50	1.25	0.94	1.88	1.00	2.00	0.75	0.44	0.41	0.25	2.00
64-0315-00	1 1/2-16	3.00	1.50	1.09	2.18	1.12	2.25	1.00	0.50	0.41	0.25	2.25
64-0318-00	1 7/8-16	3.38	1.69	1.28	2.56	1.25	2.50	1.00	0.62	0.53	0.25	2.50
64-0325-00	2 1/2-16	4.00	2.00	1.59	3.18	1.75	3.50	1.25	0.62	0.53	0.32	3.00

Mounting Flange

Model No.	A	B	C	D	E	F
64-0110-00	1 1/16-16	1.50	0.22	1.12	0.56	0.37
64-0112-00	1 1/4-16	2.25	0.34	1.56	0.78	0.75
64-0113-00	1 5/16-16	1.88	0.28	1.44	0.72	0.75
64-0115-00	1 1/2-16	2.00	0.28	1.56	0.78	0.75
64-0118-00	1 7/8-16	2.50	0.41	1.88	0.94	1.00
64-0125-00	2 1/2-16	3.25	0.53	2.44	1.22	1.25

Retaining Collar

Model No.	A	B	C
64-0010-00	1 1/16-16	1.50	0.31
64-0012-00	1 1/4-16	1.63	0.31
64-0013-00	1 5/16-16	1.63	0.31
64-0015-00	1 1/2-16	2.00	0.31
64-0016-00	1 5/8-16	2.13	0.31
64-0018-00	1 7/8-16	2.44	0.31
64-0022-00	2 1/4-16	2.88	0.31
64-0023-00	2 5/16-16	2.88	0.31
64-0025-00	2 1/2-16	3.25	0.31
64-0027-00	2 3/4-16	3.25	0.31
64-0031-00	3 1/8-16	4.00	0.50
64-0032-00	3 1/4-16	3.75	0.31



Retaining Nut

Model No.	A	B	C
64-0006-00	5/8-18	0.94	0.38
64-0007-00	3/4-16	1.12	0.42



Swing Clamp and Link Clamp Spacers

Top Flange Swing Clamp Spacers

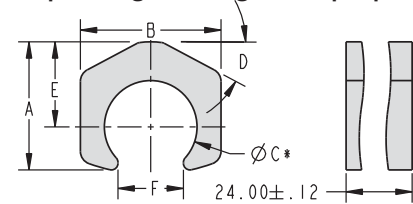
Model No.	Standard Swing Clamp or TuffCam™ Model No.	Swing Clamp Capacity	A	B	ØC*	D	E	F
64-0409-01	15-XX05-00/ 14-6X05-01-L/R	450	1.45	1.88	1.02	28°	1.02	0.75
64-0414-01	15-XX09-08/ 14-6X09-01-L/R	1100	1.97	2.31	1.45	28°	1.32	1.25
64-0417-01	15-XX13-11/ 14-6X13-01-L/R	2600	2.45	2.69	1.77	28°	1.63	1.25

* For model 14-6213-10- L/R the spacer will not fit as shipped. The "C" dimension must be machined to Ø1.88



Shipped in 24" lengths

Top Flange Swing Clamp Spacers



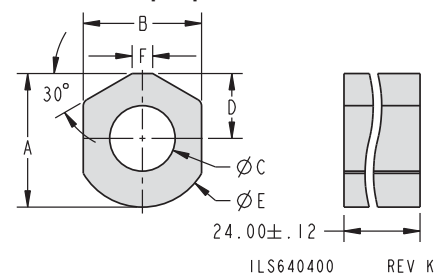
Link Clamp Spacers

Model No.	Link Clamp Model No.	Link Clamp Capacity	A	B	ØC	D	ØE	F
64-0410-01	16-6X04-00	450	2.19	1.94	1.07	1.06	2.25	0.34
64-0415-01	16-6X06-00	1100	2.81	2.50	1.51	1.31	3.00	0.55
64-0418-01	16-6X09-00	2600	3.50	3.25	1.89	1.63	3.75	0.22
64-0425-01	16-6X14-00	5000	4.50	4.13	2.51	2.13	4.75	0.23
64-0431-01	16-6X16-00	6800	5.44	5.13	3.14	2.56	5.75	0.36

NOTE:

1. Spacers ship in 24" lengths. Customer required to cut spacer to the appropriate length, drill mounting and oil feed holes to the correct size for the applicable clamp.
2. Material is extruded aluminum alloy.

Link Clamp Spacers



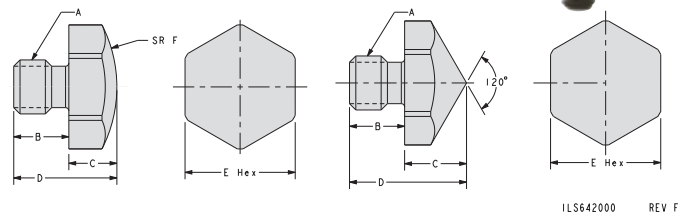
End Effectors

Conical Contact Points

Model No.	A	B	C	D	E
64-2004-10	1/4-20 UNC	0.25	0.28	0.53	0.50
64-2004-20	1/4-28 UNF	0.25	0.28	0.53	0.50
64-2005-10	5/16-18 UNC	0.25	0.38	0.63	0.75
64-2005-20	5/16-24 UNF	0.25	0.38	0.63	0.75
64-2006-10	3/8-16 UNC	0.25	0.44	0.69	0.75
64-2006-20	3/8-24 UNF	0.25	0.44	0.69	0.75
64-2007-10	7/16-14 UNC	0.25	0.38	0.63	0.63
64-2008-10	1/2-13 UNC	0.38	0.50	0.88	0.88
64-2008-20	1/2-20 UNF	0.38	0.50	0.88	0.88
64-2009-10	5/8-11 UNC	0.50	0.56	1.06	1.00
64-2009-20	5/8-18 UNF	0.50	0.56	1.06	1.00

Spherical Contact Points

Model No.	A	B	C	D	E	F
64-2104-10	1/4-20 UNC	0.25	0.22	0.47	0.50	0.63
64-2104-20	1/4-28 UNF	0.25	0.22	0.47	0.50	0.63
64-2105-10	5/16-18 UNC	0.25	0.19	0.44	0.75	1.25
64-2105-20	5/16-24 UNF	0.25	0.19	0.44	0.75	1.25
64-2106-10	3/8-16 UNC	0.31	0.25	0.56	0.75	1.25
64-2106-20	3/8-24 UNF	0.31	0.25	0.56	0.75	1.25
64-2107-10	7/16-14 UNC	0.25	0.25	0.50	0.63	0.75
64-2108-10	1/2-13 UNC	0.38	0.31	0.69	0.88	1.50
64-2108-20	1/2-20 UNF	0.38	0.31	0.69	0.88	1.50
64-2109-10	5/8-11 UNC	0.50	0.38	0.88	1.00	2.00
64-2109-20	5/8-18 UNF	0.50	0.38	0.88	1.00	2.00



Contact points have been carburized RC 37-42



Hardware

Dura Pin

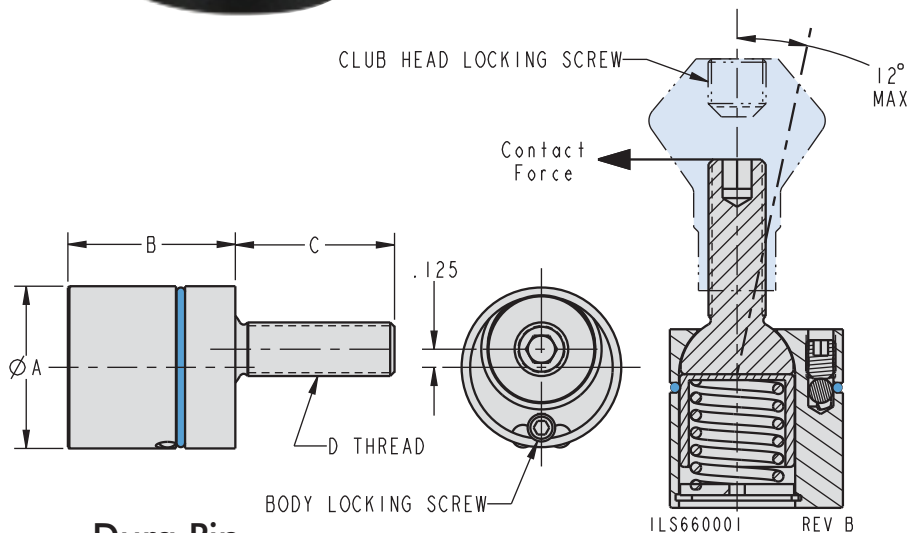


NEW

Stronger Spring Forces

Dura Pin

- Holds parts against fixture locator pins prior to clamping.
- Prevents premature part unloading when unclamping.
- Eccentric pin design for easy spring retention adjustment.
- Positive ball locking design in fixture cavity.
- Light, medium and heavy springs available for each size.
- BHC™ (Black Hard Coat) body finish.
- Hardened threaded pivot and spring cup.
- Multiple hardened club head profiles, order separately.
- Adjust club height then rotate the body to fix position, spring retention force, and location.



Dura Pin

Model No.*	Spring Force (lb)**	Pin / Lever Ratio	A	B	C	D
66-0912-01	0.8 - 0.9					
66-0912-02	1.5 - 1.8					
66-0912-03	2.5 - 3.0	1 : 4.5	0.75	0.65	0.51	8-32
66-0912-04	4.2 - 4.8					
66-0912-05	5.2 - 6.0					
66-0915-01	1.4 - 1.8					
66-0915-02	2.3 - 3.0					
66-0915-03	2.9 - 3.8	1 : 4.2	0.93	0.98	0.77	1/4-28
66-0915-04	5.2 - 5.7					
66-0915-05	7.6 - 8.5					
66-0918-01	2.8 - 3.4					
66-0918-02	4.6 - 6.5					
66-0918-03	8.2 - 11.6	1 : 4.1	1.12	1.16	1.10	3/8-24
66-0918-04	15.7 - 20.0					
66-0918-05	23.5 - 29.5					

* Club heads sold separately.

** Spring contact force values are calculated at the end of the threaded pivot. Actual force values will vary at the part depending on the club head design and contact location.

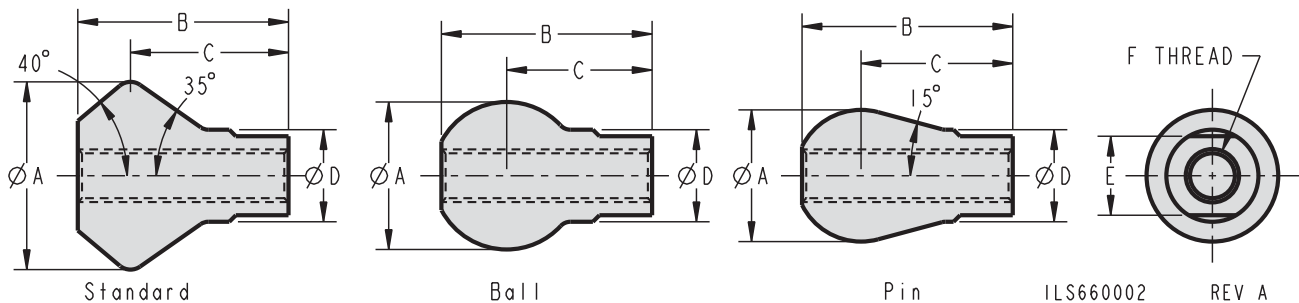


Dura Pin Club Heads

NEW
Stronger Spring Forces

Dura Pin Club Heads

- Three styles: standard, ball, and pin.
- Hardened alloy steel.
- Locking screw provided with all club heads.
- Club heads sold separate from the Dura Pin.



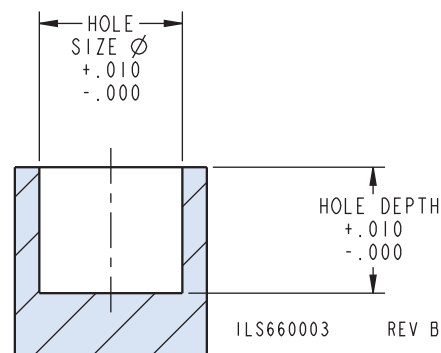
Dura Pin Club Heads

Model No.	A	B	C	D	E	F
Standard						
66-1012-01	0.53	0.62	0.47	0.25	0.22	8-32
66-1015-01	0.89	1.00	0.75	0.44	0.37	1/4-28
66-1018-01	1.14	1.50	1.10	0.56	0.50	3/8-24
Ball						
66-1012-02	0.44	0.62	0.43	0.25	0.22	8-32
66-1015-02	0.70	1.00	0.69	0.44	0.37	1/4-28
66-1018-02	0.99	1.50	1.05	0.56	0.50	3/8-24
Pin						
66-1012-03	0.40	0.62	0.45	0.25	0.22	8-32
66-1015-03	0.62	1.00	0.72	0.44	0.37	1/4-28
66-1018-03	0.87	1.50	1.11	0.56	0.50	3/8-24

L-4

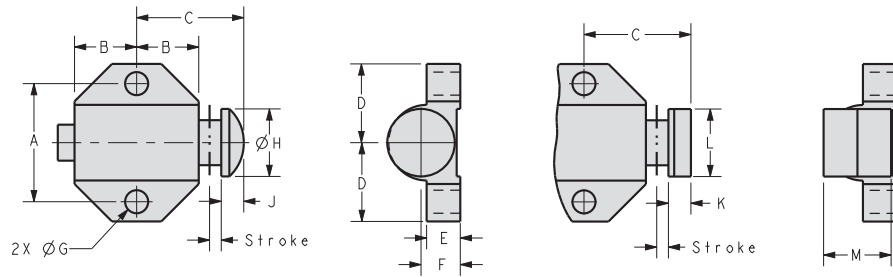
Mounting

Model No.	Hole Size	Hole Depth
66-0912-01	0.755	0.656
66-0912-02		
66-0912-03		
66-0912-04		
66-0912-05		
66-0915-01	0.942	0.994
66-0915-02		
66-0915-03		
66-0915-04		
66-0915-05		
66-0918-01	1.130	1.166
66-0918-02		
66-0918-03		
66-0918-04		
66-0918-05		



Hardware

Tooling Components



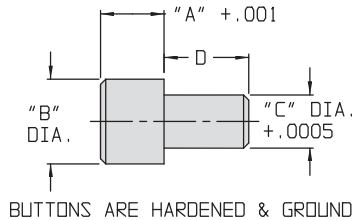
ILS660000 REV J

Aluminum Body Spring Stop Dimensions

Model No.	Nose Shape	Force** (lb)	Stroke	A	B	C	D	E	F	G	H	J	K	L	M
66-0010-00	Round	10	0.13	0.66	0.34	0.59	0.44	0.19	0.22	0.13	0.38	0.13	N/A	N/A	N/A
66-0014-00	Round	14	0.19	1.13	0.50	0.94	0.75	0.25	0.31	0.19	0.56	0.19	N/A	N/A	N/A
66-0032-00	Round	32	0.25	1.50	0.69	1.25	1.00	0.31	0.56	0.26	0.81	0.25	N/A	N/A	N/A
66-0010-01	Square	10	0.13	0.66	0.34	0.59	0.44	0.19	0.22	0.13	N/A	N/A	0.13	0.38	0.38
66-0014-01	Square	14	0.19	1.13	0.50	0.94	0.75	0.25	0.31	0.19	N/A	N/A	0.19	0.62	0.62
66-0032-01	Square	32	0.25	1.50	0.69	1.25	1.00	0.31	0.56	0.26	N/A	N/A	0.31	0.75	0.75

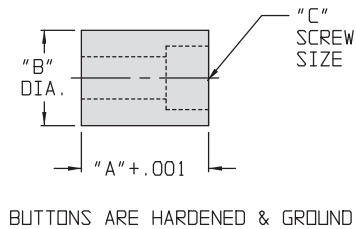
** At mid stroke

NOTE: Actual dimensions may differ slightly from listed nominal dimensions.



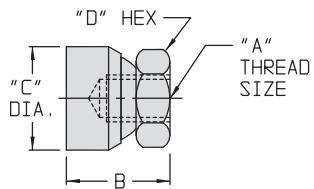
Press Fit Rest Buttons

Model No.	A	B	C	D
66-0438-01	0.375	0.38	0.1880	0.38
66-0462-02	0.500	0.62	0.3755	0.62



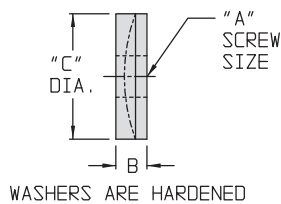
Screw On Buttons

Model No.	A	B	C
66-0562-01	0.375	0.62	1/4 S.H.C.S.
66-0562-02	0.500	0.62	1/4 S.H.C.S.
66-0562-04	0.750	0.62	1/4 S.H.C.S.
66-0562-05	1.000	0.62	1/4 S.H.C.S.



Toggle Pads

Model No.	A	B	C	D
66-0625-00	1/4-20 X 0.41	0.62	0.62	0.50
66-0632-00	5/16-18 X 0.42	0.75	0.68	0.56
66-0638-00	3/8-16 X 0.50	0.81	0.75	0.62
66-0650-00	1/2-13 X 0.53	0.94	0.88	0.75
66-0662-00	5/8-11 X 0.56	1.00	1.00	0.88



Spherical Washers

Model No.	A	B	C
66-0862-00	5/8	0.32	1.38

ILS660400 REV C

